ABSTRACT

When reception of multiplexed PSK modulated waves BPSK and 8PSK starts, a selector (16C) of a demodulation circuit (1C) read higher-order three bits $\Delta\Phi(3)$ of the phase error data corresponding to outputs I' and Q' of a remapper (7) for performing absolute phasing from a phase error table for BPSK out of tables provided for respective types of modulation methods. A reception signal phase rotation angle detection circuit (8C) detects the phase rotation angle corresponding to a bit "1" of a frame sync signal of a received symbol stream from $\Delta\Phi(3)$ and the MSB of the output I' of the remapper (7) and outputs the phase rotation angle to the remapper (7) to allow the remapper (7) to perform absolute phasing. The selector (16C) reads phase error data corresponding to the received symbol data after absolute phasing output from the remapper (7) from the phase error table corresponding to the modulating method identified by a transmission configuration identification circuit (9), outputs the phase error data to a D/A converter (17), corrects the phase of carrier waves for orthogonal detection, and causes the difference in phase between the received signal point and the transmission signal point to be constant.